Abstract (Basic): WO 9117764 A

A new antibody (I) binds selectively to an HIV-1, HIV-2 or SIV gp. 120 env. protein binding site that allows the gp. 120 env. protein to bind to a CD4 receptors. The binding site is pref. THr-257, Asp-368, Glu-370 or Asp-457. (I) is a polyclonal or monoclonal antibody, and may be conjugated to a blocking factor, cytotoxin, capping moiety or label.

Also claimed is a peptide (II) contg. 5-20 (8-15) amino acids, which has a Cys residue at the 1st, 2nd, penultimate or last portion. The peptide is used to raise (I).

Methods are claimed of using (I) to reduce the ability of a gp. 120 env protein to bind to CD4, and using (I) to inhibit infection of cells in an animal (pref. human). Treatment of a human infected by HIV-1, HIV-2 or SIV involves admin. of (I) and (II). Compsns. contg. (II) or 1-10mg (I) are claimed.

USE/ADVANTAGE - Treatment or prophylaxis of immunodefiency diseases in mammals, partic. humans. The immunogenic peptides and antibodies reduce the ability of an HIV-1, HIV-2 or SIV gp. 120 env. protein to bind to CD4. Dose is 0.1-10 mg/kg. Parenteral admin. is pref. The antibodies may also be labelled and used in quantiative immunoassays to detect the gp 120 protein, or to monitor the progression of virus in a patient already known to be infected. (53pp Dwg.No.0/7)